

# Notice of Allowability

Application No.

10/020,834

Examiner

Venkatesh Haliyur

Applicant(s)

ZHANG ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to after final amendment of 1/25/2008.
2. ☒ The allowed claim(s) is/are 1,2,5,7-11,14,16-20,23 and 25-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with John R. Witcher, III (Reg No: 39,877) on 02/14/2008.
3. The application has been amended as follows:

**In the claims:**

**a) Claims 1, 10, 19 have been amended to recite as follows:**

1. A method for initiating retransmission of frames comprising:
  - a) detecting a failed attempt to transmit a frame at a physical layer of a receiver;
  - b) sending a message from the physical layer of the receiver to a link control layer of the receiver to indicate the failed attempt to transmit a frame has been detected; and

c) upon receipt of the message, sending a retransmission message from the link control layer of the receiver, the retransmission message configured to cause a sender to retransmit data associated with the frame,

wherein the link control layer implements a Radio Link Protocol (RLP) using an RLP entity associated with an application, and

wherein the frame is a physical layer frame encapsulating data represented by an RLP frame and the sending step further comprises generating the retransmission message to include identification for one of the group consisting of a recently received RLP frame and recently received data such that the sender can identify data or an RLP frame to retransmit.

10. A communication system comprising a control system and a communication interface that cooperate to provide a physical layer and a link control layer adapted to:

a) detect a failed attempt to transmit a frame at the physical layer;

b) send a message from the physical layer to the link control layer to indicate that the failed attempt to transmit the frame has been detected; and

c) upon receipt of the message, send a retransmission message from the link control layer to a sender to cause the sender to retransmit data associated with the frame,

wherein the link control layer implements a Radio Link Protocol (RLP) using an RLP entity associated with an application, and

wherein the frame is a physical layer frame encapsulating data represented by an RLP frame and the link control layer generates the retransmission message to include identification for one of the group consisting of a recently received RLP frame and recently received data such that the sender can identify data or an RLP frame to retransmit.

19. A computer readable medium encoded with a computer program comprising instructions to instruct a processor to control a physical layer and a link control layer, such that the physical layer and the link control layer to-cooperate to:

- a) detect a failed attempt to transmit a frame at the physical layer;
- b) send a message from the physical layer to the link control layer to indicate that the failed attempt to transmit a frame has been detected;

and

- c) upon receipt of the message, send a retransmission message from the link control layer to a sender to cause the sender to retransmit data associated with the frame,

wherein the link control layer implements a Radio Link Protocol (RLP) using an RLP entity associated with an application, and

wherein the frame is a physical layer frame encapsulating data represented by an RLP frame and the link control layer generates the retransmission message to include identification for one of the group consisting of a recently received RLP frame and recently received data such that the sender can identify data or an RLP frame to retransmit.

b) Claims 3, 4, 12, 13, 21, 22 are canceled:

3. (Canceled).

4. (Canceled).

12. (Canceled).

13. (Canceled).

21. (Canceled).

22. (Canceled).

4. The following is an examiner's statement of reasons for allowance:

Claims 1-2, 5, 7-11, 14, 16-20, 23, 25-30 are allowed over prior art.

Claims 3-4, 6, 12-13, 15, 21-22, 24 are canceled.

The prior art fails to teach and render obvious the limitations as amended in the independent claims 1, 10, 19 as follows,

"detecting a failed attempt to transmit a frame at a physical layer of a receiver;

sending a message from the physical layer of the receiver to a link control layer of the receiver to indicate the failed attempt to transmit a frame has been detected; and

wherein the frame is a physical layer frame encapsulating data represented by an RLP frame and the sending step further comprises generating the retransmission message to include identification for one of the group consisting of a recently received RLP frame and recently received data such that the sender can identify data or an RLP frame to retransmit."

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkatesh Haliyur whose telephone number is 571-272-8616. The examiner can normally be reached on Monday thru Friday 8:30AM to 4:30PM.

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7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application Or proceeding is assigned is 571-273-8300.
8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Venkatesh Haliyur

Patent Examiner

*nh* 2/15/08

EDAN . ORGAD  
SUPERVISORY PATENT EXAMINER

*Edan Orgad*